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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,421	09/27/2001	Syed F.A. Hossainy	50623.60	6381

7590 06/07/2006

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EXAMINER
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NGUYEN, VI X

ART UNIT	PAPER NUMBER
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3734

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/966,421

Applicant(s)

HOSSAINY, SYED F.A.

Examiner

Victor X. Nguyen

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5-8, 10-13, 29-32, 45-48 and 50-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-8, 54-55, 62-64 and 68-70 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 10-13, 29-32, 45-48, 50-53, 56-61, 65-67, 71 and 72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3,5,45,47-48,50 and 71-72 are rejected under 35 U.S.C. 102 (e) as being anticipated by Dang et al. (U.S. 6,758,859).

Dang et al show in figures 3-4, a stent (10) that releases drug into the vascular system having depots (30) on a surface of the stent body, including: a first material (see col.5, lines 5-22) carrying a therapeutic substance. A second material (col.4, lines 17-40) configured to convert a first type of energy to a second type of energy. Note that cols. 5, lines 10-14 and lines 54-66 can be interpreted broadly that radioactive isotope for stent usage can be converted from its energy conversion material which is disposed in depots (30) of the stent. At best seen in figs. 4, 5a, the stent comprises a top coat deposited over at least a portion of the first material, and where the second material is selected from the group consisting of Au (see col. 4, lines 26-29). Furthermore, the procedures in figures 4 and 6a disclose the second material can fill completely some of the depots and where the top coat includes a polymer.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6,11-13,31-32,51,56-61 and 67 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Dang (6,758,859).

Dang discloses the invention substantially as claimed. However, Dang is silent regarding the second material comprises Au particles having a silica nano particle core or the first material is a temperature sensitive hydrogel. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the second material comprises Au particles having a silica nano particle core or the first material is a temperature sensitive hydrogel, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use or as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Claims 29-30 and 52-53 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Dang'859. Dang is silent regarding the diameter of Au particles having a silica nanoparticle from 100 to 250 nm or having a thickness of 1 to 100 nm. Nevertheless, Dang does disclose Au particles, which must be changed in the size of a component involve merely routine skill in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make Dang' the diameter of Au particles having a silica nanoparticle from 100 to 250 nm or having a thickness of 1 to 100 nm. Regarding claims 10 and 46, it would have been further obvious to one having

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ordinary skill in the art at the time the invention was made to have electromagnetic waves with wave lengths between 800 and 1200 nm into thermal energy, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

***Allowable Subject Matter***

3. Claims 7-8, 54-55, 62-64 and 68-70 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

None of the prior art of record disclose or suggest where a third material configured to convert a third type of energy received by the third material from an energy source to a fourth type of energy, where the fourth type of energy promotes release of the therapeutic substance from the stent body, and where the first type of energy and the third type of energy are electromagnetic energy, where the electromagnetic energy of the first energy type has a different wavelength than the third energy type.

***Response to Arguments***

4. Applicant's arguments filed 3/15/2006 have been considered but they are not persuasive.

In response to applicant's argument that the Dang reference does not disclose a first material including a therapeutic substance and a second material is not in the depots of the stent body. As claims 1 and 45 are currently written, the claims can be interpreted broadly that the Dang reference at least discloses a first material can be used with a therapeutic substance (see col. 5, lines 10-65), where second material (col.4, lines 17-53) configured to convert a first type of

energy to a second type of energy, and where the second material is able to depot of the stent body (see col. 4, lines 44-60).

In response to applicant's argument that the Dang reference does not disclose a top coat. In fact, Dang discloses in figures 4 and 5a, the stent (10) comprises a top coat (i.e., the depots 30 would be covered by the top coat, see col. 8, lines 48-65). Accordingly, the above noted reference is still considered to read on the claimed limitations of the claims noted.

### ***Conclusion***

**5. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor X. Nguyen whose telephone number is (571) 272-4699. The examiner can normally be reached on M-F (8-4.30 P.M).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hayes can be reached on (571) 272-4697. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Victor X Nguyen  
Examiner  
Art Unit 3734



Vn  
5/30/2006



**VEB**  
**PRIMARY EXAMINER**

May 30, 2006